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AERIAL PHOTOGRAPHIC ANALYSIS OF THE
RICHARDSON FLAT STUDY AREA
PARK CITY. UTAH

FILE PLAN

This report presents a current aerial photographic analysis of the Richardson Flat study area located approximately 3 miles northeast of Park City, Utah. The approximate 120 acre study area consists of a large tailings pond and an adjacent sanitary landfill. Color aerial photography acquired June 3, 1988 was used to perform the analysis. The study area is undef investigation by the U.S. Environmental Protection Agency's (EPA) Region 8 office; this analysis will assist in field investigation and potential enforcement actions. This site was previously covered under TS-AMD-84112, December 1984 and TS-AMD-85025/85714-4, September 1985.

The 1988 photography reveals a large tailings pond that appears active. A pipeline discharges liquid and tailings into this disposal pond, although the source of the pipeline is unknown. An earthen containment berm encloses the pond's southern perimeter, a terrain ridge forms its northern boundary. A drainage ditch along the outside of this earthen containment berm channels natural drainage around and away from the tailings pond. Along the northwestern perimeter an area of light-colored material, possibly tailings that overflowed the ponds containment berm, is visible within a wetland area adjacent to Silver Creek. A large accumulation of standing liquid is visible within the northern portion of the pond.

Within the tailings ponds recent disposal of tailings is visible as evidenced by a light colored material and a yellow-orange liquid present. Older portions of the tailings pond are covered with vegetation. Within this vegetated area numerous trenches and pits are observed. Dark material has been spread at several locations. Mounded material is also observed in these locations. Graded areas and excavations containing standing liquid are also noted within the tailings pond. Several fill areas are located south of the tailings pond, one of which contains solid waste. Tailings, identified as light-colored material and yellow-orange liquid, are visible within several of the drainage channels in this area. These tailings may eventually reach Silver Creek.

A solid waste sanitary landfill is located southwest of the tailings pond. Extensive highway construction is evident within the landfill area evidenced by large areas of grading, mounded material, and numerous earthmoving vehicles. The actual construction is occurring upon the southern portion of the landfill, while the northern portion shows signs of continued disposal activity. Solid waste is noted throughout the landfill area. Numerous borrow areas are visible within the landfill/construction area. Additional highway construction is noted north of the landfill, it appears the construction may possibly impede the flow of Silver Creek. At this time fill material is observed within the creek channel at one location. Tailings are also noted within Silver Creek, the source of which is unknown.

The Richardson Flat tailings reportedly contained elevated levels of heavy metals. Dust lifted from these tailings by winds adds to atmospheric pollution. These tailings are also a potential source of contamination of ground and surface water in the area. Both the tailings pond and sanitary landfill could potentially threaten the adjacent Silver Creek.

No evidence of leachate or vegetation stress associated with operations at the tailings pond or landfill is discerned. Several wetlands are visible within close proximity of the site. The study area appears susceptible to 100-year flood events.

The U.S. Environmental Protection Agency's Environmental Systems Laboratory in Las Vegas, Nevada, prepared this report for the Agency's Environmental Services Division in Region 8 at Denver, Colorado and the Office of Emergency and Remedial Response in Washington, D.C.